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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,147	12/09/2005	Peter Hofbauer	APT-2.009.PCT.US	9462

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EXAMINER	
GONZALEZ, JULIO C	
ART UNIT	PAPER NUMBER
2834	
MAIL DATE	DELIVERY MODE
02/23/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/560,147	HOFBAUER ET AL.	
	Examiner	Art Unit	
	Julio C. Gonzalez	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 January 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *10,12-15 and 22-42* is/are pending in the application.

4a) Of the above claim(s) *22-42* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *10 and 12-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 January 2009* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/14/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Newly submitted claims 22 – 42 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: disclosing having an engine coupled to a first rotatable member and disclosing that either the first magnetic flux generating element or the first current conducting element is fixedly disposed in relation to the first rotatable hub at a specified radius and the first magnetic flux generating element and first current conducting element cooperate so that during rotation of the first rotatable hub, electric current flow is induced in the first current conducting element and the blades being coplanar, arc segments, arc segment degree separation, etc.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 22 – 42 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dildine (US 2,823,653) in view of Heniges (US 4,485,768).

Dildine discloses a generating device having an opposed piston 36, 38, opposed cylinder engine (see figure 1) having a ring assembly (generator 16) having a shat 18 and the generator 16 having a magnetic flux generating element (rotor) and current conducting element (stator of generator 16). Dildine teaches inherently such flux and conducting elements since it is well known in the art that generators produce flux and the stator (fixed element) have conducting elements for transmitting/interacting with the rotor of the generator.
However, Dildine does not disclose having a crankshaft of an engine being connected to a drive shaft.

On the other hand, Heniges discloses for the purpose of changing efficiently the piston stroke and compression ratio of an engine, an opposed piston, opposed cylinder engine having a crankshaft (see figures 3, 7) and such crankshaft is

coupled to a driveshaft 13 (see figure 4). Moreover, the assembly has a speed differential apparatus (gears 36-39, 40, device 35) in which gear 36 is disposed on driveshaft 13 and the gears are connected to the crankshaft (see figure 4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a generating system as disclosed by Dildine and to have a crankshaft being connected to a driveshaft for the purpose of changing efficiently the piston stroke and compression ratio of an engine as disclosed by Heniges.

4. Claims 10, 12, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dildine (US 2,823,653) in view of Heniges (US 4,485,768) and Patarchi (US 6,486,582).

Dildine discloses a generating device having an opposed piston 36, 38, opposed cylinder engine (see figure 1) having a ring assembly (generator 16) having a shat 18 and the generator 16 having a magnetic flux generating element (rotor) and current conducting element (stator of generator 16). Dildine teaches inherently such flux and conducting elements since it is well known in the art that generators produce flux and the stator (fixed element) have conducting elements for transmitting/interacting with the rotor of the generator.

However, Dildine does not disclose having a crankshaft of an engine being connected to a drive shaft.

On the other hand, Heniges discloses for the purpose of changing efficiently the piston stroke and compression ratio of an engine, an opposed piston, opposed cylinder engine having a crankshaft (see figures 3, 7) and such crankshaft is coupled to a driveshaft 13 (see figure 4). Moreover, the assembly has a speed differential apparatus (gears 36-39, 40, device 35) in which gear 36 is disposed on driveshaft 13 and the gears are connected to the crankshaft (see figure 4).

However, neither Dildine nor Heniges disclose that the flux generating elements is made of a plurality of magnets.

On the other hand, Patarchi discloses for the purpose of providing a dynamo electric machine that is reliable and easy to maintain, a magnetic flux generating element being made of a plurality of magnets 10, 11 (see figure 1), which interact with winding 20 of stator 2 (see figure 4). It is also disclosed that the rotor 6 is made of soft iron (column 4, lines 8, 9), thus it is made of a ferrous material. Moreover, it is disclosed a ring assembly having a plurality of blades 41 disposed from a shaft (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a generating system as disclosed by Dildine and

to have a crankshaft being connected to a driveshaft for the purpose of changing efficiently the piston stroke and compression ratio of an engine as disclosed by Heniges and to have a ring assembly having a plurality of blades disposed on a shaft for the purpose of providing a dynamo electric machine that is reliable and easy to maintain as disclosed by Patarchi.

5. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dildine, Heniges and Patarchi as applied to claim 14 above, and further in view of Umeda (US 2002/0135257).

The combined generating apparatus discloses all of the elements above. However, the combined generating apparatus does not disclose using three phase winding in the stator.

On the other hand, Umeda discloses for the purpose of providing a generator that is able to change the output characteristics smoothly that generator 1 (see figure 1) uses two sets of three phase winding in the stator (see figures 6, 9; paragraph 0016).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined generating apparatus as disclosed above and to modify the invention by using two sets of three phase

winding in the stator for the purpose of providing a generator that is able to change the output characteristics smoothly as disclosed by Umeda.

Response to Arguments

6. Applicant's arguments with respect to claims 10, 12, 13 have been considered but are moot in view of the new ground(s) of rejection.

7. Applicant's arguments filed 01/07/09 have been fully considered but they are not persuasive. With respect to claim 14, the remarks stated that the prior art (Dildine reference) does not disclose that the generator has as stator and further concluded that a generator may or may not include a stator.

The Merriam-Webster's Collegiate Dictionary defines the word *stator* as a stationary part in a machine in or about which a rotor revolves, thus the stator is the non rotating part in a magnetic structure. A generator must have a stator and a rotor in order to function (emphasis added). For a generator to induce flux and/or create a magnetic field and thus produce electricity, a stator must be provided so that stator and rotor interact to produce flux, otherwise, the generator would not produce electrical energy. See notes of the book, Electrical Power. The stator interacts with the rotor to conduct power/voltage/current/flux.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is 571-272-2024. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Quyen Leung can be reached on 571-272-8188.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Julio C. Gonzalez/
Primary Examiner, Art Unit 2834

February 12, 2009

/J. C. G./
Primary Examiner, Art Unit 2834